

To: Robichaud, Jeffery[Robichaud.Jeffery@epa.gov]
From: Hoke, John
Sent: Fri 9/18/2015 9:38:14 PM
Subject: RE: regression calculations for Missouri nutrient criteria

Info in the spreadsheet is on chl-a, TN, TP and regression analyses. Microcystin stuff was from literature I believe.

We should have that data, but I can't recall if that was in the spreadsheets.

Graham, J., & Jones, J. (2009). Microcystin in Missouri Reservoirs. *Lake and Reservoir Management*, 25:3 253-263.

Graham, J., Jones, J., Jones, S., Downing, J., & Clevenger, T. (2004). Environmental factors influencing microcystin distribution and concentration in the Midwestern United States. *Water Research*, 38(2004)4395-4404.

John Hoke

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From: Robichaud, Jeffery [mailto:Robichaud.Jeffery@epa.gov]
Sent: Friday, September 18, 2015 4:34 PM
To: Hoke, John
Subject: RE: regression calculations for Missouri nutrient criteria

Before I dig too deep...is the microcystin stuff in here?

Jeffery Robichaud

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From: Hoke, John [<mailto:john.hoke@dnr.mo.gov>]

Sent: Friday, September 18, 2015 4:30 PM

To: Robichaud, Jeffery

Subject: FW: regression calculations for Missouri nutrient criteria

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From: Osborn, Mark

Sent: Friday, September 18, 2015 11:54 AM
To: Bob Angelo (angelo.bob@epa.gov); delashmit.john@epamail.epa.gov
Cc: Hoke, John
Subject: regression calculations for Missouri nutrient criteria

The attached files have calculations that were used in deriving screening levels for TN and TP, with Chl-a as a response variable. The regressions are based on yearly geometric means for individual lakes. The regressions are transformed one time using iteratively weighted least squares, as described in Helsel and Hirsch, on page 283.

Please let me know if you have any questions.

Mark Osborn

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